

**NDRC Topical Webinar: Integrated Resilience Planning
Webinar Transcript
Thursday, September 3, 2015
3:00 – 4:30 p.m.**

Patrick: Questions that are most relevant. We do have a disclaimer today that I will read. Again, this is Patrick Taylor with the Cloudburst Group. This presentation is intended to provide communities and states with the tools and information to help in climate-resilience planning and activities. Information presented in this Webinar is independent of the Notice of the Funding Availability, the NOFA, for the National Disaster Resilience Competition, NDRC. While we expect that this information will be useful to interested communities and eligible applicants, it should not be construed as the definitive word on any singular approach to resilience. No NOFA NDRC questions will be answered during this presentation. All NOFA questions should be sent to: ResilientRecovery@HUD.gov. If you have other questions today that you want to send, either they've been unanswered, or you want to send a private question, you can send that again to: ResilientRecovery@HUD.gov. And with that I will turn it over to our first presenter, Gavin Smith.

[Pause from 00:01:17 to 00:01:51]

Gavin: This is Gavin. I'm actually, for some reason the slide deck—Let's see. For some reason the slide deck was-- I see. Okay. Can everyone see the first slide?

Patrick: Yes.

Patrick: Yes.

Gavin: Okay. I'm sorry. All right. Well, thank you for having me. My name's Gavin Smith. I'm a Research Professor in the Department of City & Regional Planning at the University of North Carolina, Chapel Hill and lead a Department of Homeland Security Venture of Excellence focus on Coastal Resilience. What I thought I would do today is talk a couple of things. One is the issue of resilience and look at resilience nested within the context of climate change as well as natural hazards and disasters, talk a little bit about resilience.

I know that this may seem like unnecessary, but I'll talk about resilience in a specific way, so I hope it will help inform those who are involved in the pursuit of resilience. I'll talk about it in the context of hazard mitigation and disaster recovery. I'll talk about a few principles of resilience, if you will, and how we overcome what are actually pretty strong barriers to actually achieving resilience.

Obviously I think most of the people on the call understand what hazard mitigation is, so I'm not going to spend a lot of time talking about it other than to say that one of things that we need to really think about, if we're talking about resilience and hazard mitigation, is the importance of being proactive. A lot of policies and programs associated with hazard mitigation is often reactive to money, it often comes after disaster, ironically, to reduce future risks, but also we think about often times hazard mitigation in terms of projects, buying homes, elevating homes, and so forth when, reality some of the most systemic elements of risk reduction are policies. Those are important to include and consider land-use planning as a key tool to address that.

The idea of natural-hazards planning really has gotten legs through the disaster mitigation act of 2000, yet one of the challenges that we face, in fact based on a study that Phil Burke, myself, and Ward Lyles did, we evaluated hundreds of hazard-mitigation plans at state and local levels, and we found three basic weaknesses. One is those plans don't do a good job linking the findings associated with the risk assessment and the selection or identification of potential policies and

projects. Land use was rarely used as a risk reduction measure in those plans, and very few of those plans referenced climate-change adaptation. I mention this because the-- I'll talk about the context of hazard mitigation, disaster recovery, climate-change adaptation, and its nexus in using resilience as a central theme, but these are some of the fundamental challenges we face in hazard mitigation.

If you look at the images on the right, the one at the top is simply a hazard-mitigation planning process, if you will. It looks very similar to the climate change adaptation planning process; yet what we're finding is that these two groups aren't working together very effectively. Hazard mitigation, climate change adaptation communities still remain a bit bifurcated. If we were to look at this intersection in the context of disaster recovery and thinking about recovery as another venue to better adapt the change in climate and become more resilient, you have to think about defining what recovery is.

Historically it's often been looked at as the physical reconstruction of communities after disaster. In reality it's much more than that. It involves, not only rebuilding, but it's also the idea of restoration of environmental systems and even reshaping them and restoring physical, social, economic, and natural systems, if you will, through both pre-event planning and post event actions. This is a definition that myself and Dennis Langer came up with that really goes to the breadth of options, if you will, that are before us in the context of disaster recovery. In some ways it also goes back to the idea of sustainability. These are similar dimensions that you would see in the sustainable development literature.

Disaster recovery also, it's important for us to understand that recovery often exposes significant pre-event conditions that may be hazard vulnerability, particularly socially vulnerable populations. It may uncover the fact that planning cultures are strong, weak, or moderate. The degree to which risk reduction and disaster recovery embraces planning is widely varied. Disaster often also recognizes or many of the policies that are developed and delivered after disasters, frequently they don't effectively meet local needs. This is a real problem that we find again and again in disasters.

We often think of disaster as opportunity. Communities and states and federal agencies often talk about that, and it can be an opportunity to inject risk reduction, adaptation, hazard mitigation, resilience, sustainable development, for example, but I think we need to be very careful about this notion of opportunity in essence because, what you often don't ask, opportunity for whom. Those in positions of power at the local and state level may drive the way recovery is achieved. It may end up with a powerful disincentive to inject risk reduction into it, but rather in some cases it can provide a venue to grow significantly after disaster and exacerbate risk. That happens repeatedly after disasters. In many cases that also limits resilience.

Then finally in terms of recovery, if you think about recovery in a temporal context, this pressure, intense pressure to try to figure out how to balance this notion of speed versus deliberation. The idea that after disasters, there's often intense pressure to rebuild communities. It may take less time to rebuild them to their pre-event form than to engage in deliberative processes that look at sustainability and resilience. We need to recognize that strong counterbalance and also of course the value of developing pre-disaster recovery plans that allow you the time needed to address big-picture issues, like things such as resettlement of vulnerable locations.

The definition of resilience, for some it may seem elementary to bring up resilience, but in my conversations with a number of actual academics and practitioners, I think we don't do a very good job of describing resilience. This is to me one of the better definitions. Dave Gottschalk, a faculty member in city & regional planning at UNC has talked about. I'm not going to walk through each of these, but to think about the breadth of resilience looking at things like the social dimension and

network social systems, looking at the idea of learning from past disasters, anticipating risk and taking action in advance of it.

The idea of developing flexible systems, whether they're infrastructure or social networks and so forth--and reducing risk, but also thinking about how we build the capacity to do this and to address resilience as a more systemic approach, which in many ways to me, resilience is much broader than the concept of hazard mitigation, but rather it's important for us to realize that this is an opportunity for us to learn and inject, if you will, resilience thinking into the day to day activities of at-risk communities. I would argue that we often don't do that, that latter portion.

Some of the principles of resilience to think through these issue is the idea of taking a long-term view to recognize, both episodic events, namely natural hazards and disasters, but also those slow onset changes such as sea level rise, coastal erosion, subsidence and other issues. Thinking through how resilience can be achieved is critical to take a long-term, future orientation, which in many ways links us back to sustainability.

The idea that good resilience and enduring resilience requires multiple levels of engagement that everyone from the individual to the global set of players. That's one of the things that makes it so challenging, the idea of group planning and other stakeholder engagement procedures. How do you create a compelling vision, if you will, of what your future is rather than having it dictated to you by if you will outside technical experts, but rather engaging in a dialogue with those individual that reside at the community level.

Additional elements of resilience are thinking about, whenever possible, to locate critical facilities out of harm's way. That can be a major challenge in urban areas. For example after disaster, is there a chance to reconsider how those critical facilities are located? Perhaps they should be relocated if you will. Planning ahead for resilient recovery and growth, thinking about how you can, in a thoughtful, deliberative way, maximize post-disaster resources, how do you enhance resilience through that venue, how do you preserve, restore ecosystems and ecological infrastructure. In many ways the images on the right are prototypical case.

For those who are not aware, this is Charlotte Mecklenburg, North Carolina. One of the things that they did, they were repeatedly flooded. They're a large metropolitan area. As a result they weren't getting federally declared disasters, but they also realize that more and more their homes were flooding. This led them ultimately to create future conditions mapping that goes above and beyond FEMA's static floodplain maps. They've regulated their maps today as if their floodplains are already built out, which changes their flood elevations 8 to 12 feet, and dramatically expands the breadth of the floodplain.

One of the ways they were able to achieve this is to work with the private sector and builders who are becoming known as those that build homes that flood repeatedly. They engaged. They met with social-justice groups, nonprofits and others. Through long-standing, long-term negotiations ultimately agreed to create future conditions maps, like you see in the bottom image. They also because they planned ahead, and they weren't getting federal dollars after disaster, they had prepared pre-event applications for hazard mitigation grant funds. It just so happens in the state of North Carolina, there was money available after Hurricane Floyd. Even though they weren't declared, the state realized that the city and the county had developed an application. They in turn used it to buy out homes in floodplain, so they're not-- and you see the image in the middle, that areas that was bought out and torn down became open space. The homes adjacent to the greenways their value actually increased over time. So you're dealing with issues of environmental resilience, economic resilience, as well as if you will, physical resilience.

Additional elements or principles of resilience going back to this issue of planning and the value of linking planning to long term, community sustainability is to think about how these ideas are mutually reinforcing. The images on the right, this is fairly small rural community, Kinston, North Carolina. Large scale buyouts after Hurricane Fran in '96, 150 homes. After Hurricane Floyd, they were flooded again, and they had already developed a pre-event application for more buyouts, if you will, 700 homes in total. They were able, it took one year to develop the application after Hurricane Fran. They had predeveloped an application prior to the next major disaster. They submitted it, and it was approved a week after the storm going back to the value and importance of pre-disaster planning, proposed disaster recovery. It gained them access to substantial funds.

Those areas have been acquired and turned into open space, another example of resilience in a community because of good pre-event planning was able to also - those homeowners that were being acquired, they worked with them to relocate within the city center on either vacant lots or in homes that were for sale, but they were outside of the floodplain, so they were linking risk reduction as well as -- they've linked that if you will to their smart growth plan. They were trying to avoid people moving outside of their relatively rural location. So again achieving multiple aims through hazard mitigation and disaster recovery.

Additional principles of resilience. Thinking about the notion of the social dimension if you will. The image on the right is a photograph that I took in Broadmoor, a community in New Orleans. They were one of those communities that had the proverbial green dot placed on them, the idea that they could be turned into open space. The community did not want to do that. They wanted to rebuild. They worked very hard at identifying where people from their community had moved to. They were able to bring them back.

They actually engaged in marketing techniques to let people and elected officials know that they did want to return to their community. So they really focused on building social capital that allowed them and others that were suggesting that this should be turned into open space. They utilized significant participatory planning techniques to engage their community. And ultimately if you were to go back today, Broadmoor is one of the real success stories of the recovery effort in New Orleans.

Some barriers to resilience? The issue of, these are counterbalances to those examples that I just gave that some communities are giving limited importance to hazard vulnerability, may not be confronting substantial issues in the future. Both Charlotte and Kinston and Broadmoor did confront those issues head on. The idea of limited resources and competing priorities, communities are often faced with that. Yet in reality through good pre-event planning and well as post-disaster planning, the examples that I've provided were able to recognize that some of these priorities weren't necessarily competing.

For example in Kinston, the idea of affordable housing is a real challenge. Well, they didn't want to lose many of the homes that were being acquired for affordable housing. What they ended up doing is identifying affordable housing options outside the floodplains for those that were being acquired, how they could in turn move back into these homes that were available for sale for purchase limiting sprawl, reducing – or providing low-income housing for individuals and reducing risk.

Some ideas if you will for overcoming barriers? The idea hopefully has been clarified by some the cases or the examples I've given. How do you integrate hazard reduction and resilience into projects with community support. In all cases that was one of the reasons that they were successful is that in Charlotte and in Kinston and in Broadmoor, they were all engaged closely with their community. The idea that vulnerability has been injected into land use, planning and policy in those three communities is important.

Land use tools were employed in all cases Kinston being one where they were, not only acquiring flood prone properties, but also working with those individuals that were relocated to move back into the city center or the town center. Think about ways to make this broad concept of resilience visible and tangible. Charlotte Mecklenburg is a good case in point where they were able to link, if you will, resilience and get the private-sector building community engaged to realize that they didn't want to be known as those builders that build homes that flooded repeatedly. As a result they started to understand that they were being known as people who were building homes that were flood prone. Now they're actually advocates for more proactive land use planning.

Finally a bullet noting the idea in some ways going back to sustainability, is how do we more effectively link these issues into elementary, high school, and even college curricula in order to, if you will, make this a way for all ages if you will to think about these issues and make resilience a recognized, understood element of day to day living.

I'm not sure if - that may be my last slide. It's not advancing the slide deck, so that may be my last slide. I'm not sure. Are there - I have just a few minutes. Unfortunately I have class at 3:30. Do we want to answer questions, or should I hand it off. I may actually need to.

Kevin: Let's actually hand it off if that's okay, Gavin. If folks have questions they can always email your presentation and I'll relay those to you.

Gavin: Okay. I apologize. I'm going to have to step away.

Kevin: Thank you so much Gavin. I appreciate it.

Gavin: OK. Alright. Take care.

Kevin: Our next presenter, which I'll introduce really quick-- I apologize for not being able to give you Gavin's background, but needless to say, he's been around the block and knows a lot of stuff very well. Our next presenter is Wayne Feiden. Wayne's the Director for Planning and Sustainability for Northampton, Massachusetts and an adjunct lecturer and the University of Massachusetts. He led Northampton to the nation's first five-star community sustainability rating., the highest score in Massachusetts former smartgrowth program; and bike friendly; pedestrian; friendly APA, Great Streets; National Historic Trust, Distinctive Communities. You name it, Wayne has gotten his community these designations. He's also authored a number of American Planning Association planner-advisory service reports. We're excited to hear about the work he's doing in aligning all of these efforts at Northampton. Wayne, why don't you take it away.

Wayne: Thanks. I want to talk generally about sort of resiliency in as broad of a perspective as possible. Northampton is a small city. We're not coastal; though, we certainly have major rivers that flood all of the time. We've gone through a lot of planning processes. Most recently that STAR (Sustainability Tools for Assessing and Rating Communities) Communities process. STAR has _____ [00:21:15] seven different goal areas. We began the process by saying, how are we doing generally with sustainability, not just recently. We went to the Star system. Then we went back to Star and said, okay, what do these things really have to do with resiliency?

The more we looked at it, the more we realized that everything has something to do with resiliency. Some things were more directly involved in terms of climate change and natural systems in built environment, but even indirectly everything sort of had something to do with resiliency. So we sort of said, okay. if everything has something to do with resiliency, what are the things about which we really care about. What are the things that are most important in a traditional sense. You don't have to sit and read the words in the slide, but our process was—if Star was sort of comparing us against our peers around the country. How are other communities doing? We then went through an

internal assessment process, and we were looking at what are all of the different city agencies that have a lot to do with resiliency.

A lot of other things that aren't on here, our IT department isn't here. We really focused on what city department have a lot to do with resiliency, and how do we think we're doing? The area that's the dark box on there is basically we think that we're doing well as a community in terms of acknowledging that the climate is changing, that we have resiliency challenges. The Northeast doesn't have a lot climate deniers, so we know we have those issues. What came out in our own assessment is we're actually doing a lot of good things across the board, but we don't think we're dealing with it as systematically as we should. What came out of this assessment for the city is we said, we're doing a lot of climate adaptation steps, but we don't have an adaptation plan. We began sort of stepping back and saying, let's not just keep doing all of these steps. Let's sit back, work with the community and make a comprehensive plan for how we're dealing with all of those things.

Gavin talked about communities that have weak planning culture. For us it's not just the planning culture, it's really the community culture. And our argument is always that you can tell how sustainable a community is, how resilient a community is by knocking on random doors and asking people to tell us what they think the big issues are in the community.

The community where people don't care about resiliency is the community where it's really hard to build political support for becoming more resilient. And the communities where there's support are the communities where we can actually do something. Part of the reason we actually step back from doing individual actions was we felt like we were moving ahead of the community. And if we move ahead of the community, our steps are only as good as individual department heads and individual mayors. Only if we get the community buy in will the things we do survive change of administration.

Then thinking about that, we went back. What are all of the things that we're doing? Again, a lot of these things are unique to Northampton. There are some unique issues that wouldn't apply elsewhere, but the lens that we use I think is still applicable. We didn't allow any new development in our 100-year floodplain for years. Again, much easier for us than a lot of communities because the 100-year flood plan is largely our culture, and so it wasn't that hard to do. But we changed it to a 500-year floodplain, not so much to protect against a the 500-year storm, but because we don't have good models for what does climate change mean in terms of how floods will change. So the 500-year floodplain is sort of a surrogate for climate change.

We want to go back and do some more assessments. Some of the 500-year floodplain probably is not a concern, and some places outside of it are a concern. We want to make sure the conversation about resiliency is about all aspects of the community. So, for us being a walkable community, having lots of housing close to our downtown is really important. Those are the areas where, if we lose power, those areas where transportation gets expensive. Those areas, for a lot of reasons, we think are important as part of a resilient community.

We've been focused on mixed-use neighborhoods and compact developments for decades, but sort putting as a new lens this thing that is part of resiliency was important for us. Then I think Gavin talked about this as well, but thinking about housing for all populations. We're not just becoming a community that does a lot of the right things. Now only rich people can afford to stay. Likewise most of the good things we've been doing for transportation aren't particularly about resilience, but we've sort of gone back and looked at those things, and said, okay, we've been focused on green streets anyway, but should we be looking in a different way at green streets from a resiliency model?

For us for example as we move towards both green infrastructure and complete streets, the issue comes up all of the time is we have a limited right away, what's the tradeoff. If we have five feet of extra real estate, would we rather have low-impact develop and good drainage, or would we rather have new sidewalks. Using the resiliency lens is sort of part of how we've been trying to mediate some of those potential conflicts that are out there.

Climate energy. Again, we've been doing things for climate mitigation for a long time. I think that climate mitigation is really important worldwide; although, I wouldn't argue that it's particularly for immediate climate adaptation. Our focus on climate adaptation really again thinking about what are those things that we can particularly do to be a more resilient community. We know that our electric grid has failed more recently in the last decade than it has in a long time before then, so we've been looking at a microgrid that would serve our department of public works, our hospital, and one of our shelters, so that, if we lose power for a long time, we can serve those critical areas. And again, thinking about it from resiliency models made it easier to make the case and to improve resources for that.

Health, equity and empowerment. This is important for us for two reasons. One is again the equity piece is really important. We don't [do] want to make sure that we have great evacuations routes, that everyone has cars and can get out of town if a big storm comes. Then the people who don't have access to cars can't get out. So thinking about equity as part of the conversation is really important. In particular, as we think about different diseases that may be getting worse with climate change for us, we know that those diseases don't hit all populations equally, and so trying to think about what diseases are changing with time, what are the vulnerable populations, and how do we ensure that we're treating everybody the same. That's probably the area we've been the weakest in the past, and we've been making the most improvements in the last few years.

Then finally natural systems. This is an area which we've been doing for a long time. We buy about a half a percent of the city per year as open space, but our mission in the past has really been sort of in parks for neighborhoods and generally conservation purposes. We're now thinking about it more from a climate change standpoint of how do we make sure that, as tree types change for example with warmer climate, that we have a continuous band of open space through the city, so that we can get migration of trees, migration of wildlife over the coming decades. Again, it's looking at what we've been doing anyway with a slightly different filter, a resiliency filter.

There are two final slides I want to talk about. These are other projects. Northampton is a member of a network that's been trying to build technical assistance around New England, helping communities with resiliency problems. We had two rounds last year. We're doing two rounds this year. One of the things that's really interesting for me is when we offer this program in that state or in New England, and we said tell us your biggest resiliency problems and how we can help, it was interesting how communities defined it.

Provincetown the coastal community, certainly community should be worrying about sea-level rise and [about] bigger storms. They are worrying about that, but when asked to talk to them, what they said is, look, our biggest resiliency problem is that all of these rich people are coming in. They're buying homes, that they're staying for ten weeks a year, and then the homes are empty the rest of the year. They're bidding up the prices. All of the people who live here and work here can no longer afford to be here, so resiliency for us is we don't want to be a town where nobody lives, where everybody has to commute in 30 miles from somewhere else. So in terms of resiliency they really focus on resiliency as the natural thing, but it's also the people, it's how we make those systems complete.

Then finally likewise, the other project we were involved with is Bath, Maine. Bath is along a tidal river. They are concerned about sea level rise, and rightly so, but they also have some economic-

development challenges. The conversation in Bath was, how do you protect against bigger storms, how do you protect against sea-level rise, but not in a way that makes us scared of water, but to really celebrate water as a unifying principle downtown, and how can we think we can deal with resiliency challenges in a way that actually makes the community richer for it.

Thank you. [Pause from 00:30:44 to 00:31:01]

Wayne: Jennifer are you there.

Jennifer: Yes. I'm here.

Wayne: You're up.

Kevin: Great thanks. Why don't we get the presentation passed over to Jennifer. I'll introduce you really quickly. This Kevin Bush again from HUD. Our next presenter Jennifer Burmester is the Program Manager for FEMA's National Mitigation Planning program. I'm sure you all know FEMA. Since joining FEMA in 2002, Ms. Burmester gained experience supporting the mitigation program, business analysis activities, as well as, pre-disaster mitigation program. Before joining FEMA, she worked in the private sector performing various solid waste management and environmental planning activities as well as evaluating potential environmental liabilities. Jennifer, we're going to pass it to you, and then after your presentation, we'll be able to take a few questions. Just a reminder folks that, if you do have a question, type it into the chat box, and we'll sort through those. Thanks very much.

Jennifer: Okay. Very good. Thank you very much for the opportunity to join you today. This is again Jenny Burmester with FEMA. I just wanted to take a few minutes today and just really talk about FEMA's mitigation planning program to talk a little bit about the framework for the program and the breadth of mitigation, as well as a bit of the experience that we've had and certainly talk about the benefits of mitigation planning. Again I think, as Gavin mentioned at the top of this session, you are certainly an audience that understands this language and the connections with the work you do. But I also wanted to spend a few minutes and share some of the resources that are available from FEMA's mitigation planning website, so that you are aware of the resources that may help you in the work that you do.

The first place I'd like to start is just a bit of a framework, an overview of planning and just give you a sense for the breadth of coverage of mitigation plans across the nation. The map that I'm sharing with you is as of the summer, at the end of June, and just giving a sense of the number of communities that have engaged in mitigation planning, those with approved plans, or those that are approved pending adoption, as well as, those that have expired, but still indicating that these communities have engaged in this process at some time, and really just going back to the framework for this program.

It really goes back to 15 years ago, when the Disaster Mitigation Act of 2000 amended the Stafford Act. That created the legal framework for the program. Shortly after that the program issued federal regulations that really guides the requirements for state, local, and tribal mitigation planning. That creates a framework then, as communities engage in this planning process it sets forth those requirements at a minimum that need to be met. The program is unique in the sense that every jurisdiction that engages in the process, the governing body adopts the plan, and the plans are reviewed and approved by FEMA.

The plans are generally updated on a five-year cycle in order for these jurisdictions to maintain eligibility for certain FEMA assistance programs. At the state level that includes access to FEMA's public assistance programs, the categories C through G in particular, as well as, the fire

management assistance grants, but it also creates a gateway into FEMA's hazard mitigation, assistance programs, and that includes the hazard-mitigation, grant program; the pre-disaster-mitigation program; as well as flood mitigation assistance.

And so I just wanted to share with you a little bit about the framework for the program to give you a sense of just that coverage across the nation and that engagement over time. This map shows that, as of the end of June, there were just under 23,000 communities that had engaged with either approved plans or plans that were approved pending adoption. I also wanted to share with you that every state - all 50 states have an approved FEMA plan as well as the District of Columbia and five U.S. territories. Again, there's a broad coverage of those that have engaged in mitigation planning, the process.

Then I'd also like to share with you, and again, this actually touches a little bit back to Gavin's presentation, but it's certainly touching on the benefits of engaging in mitigation planning. The planning process that has been laid out is a fairly common planning process in terms of beginning to organize the planning process and engaging stakeholders, moving through a risk assessment to identify risks and assess vulnerability to those hazards, but then really developing that long term strategy, so identifying goals, setting priorities, and then taking action to reduce that risk. These actions can be very broad. Certainly as I mentioned these mitigation plans are a gateway to certain FEMA assistance, including those hazard mitigation assistance project grants.

Really, when we think back to the language that was included in our regulations, I just wanted to share that purpose. This is really a quote from 201.1, that's Title 44 Code of Federal Regulations part 201. That's the citation for the regulations, but at part B it talks about the purpose of mitigation planning is for state, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities, to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resource. And I share them with you, again, because it really is a fairly broad planning process and designed to engage the community and to position the community for taking those actions to really reduce or eliminate that long term risk to life and property.

I'd like to now actually just highlight one of the resources that I think might be of interest to you. We have a number of guidance products that we've developed over the years, including our policy. We have these products on the mitigation planning website. I'll share the links with you as my final slide. This document I wanted to share with you, it's called 'Integrating Hazard Mitigation Into Local Planning.' The document itself, we produced that in 2013. It includes a variety of information including a chapter on case studies, as well as a series of facts sheets that are one to two page, fact sheets really highlighting a number of opportunities about integrating hazard mitigation into local, comprehensive planning; talking through the role of local leadership; focusing on social and economic benefits; also planning for the post-disaster redevelopment opportunities; and then protecting community infrastructure.

Three of the links I have included here, again, just to make it a little bit easier for you to find these on our website. I'm thinking that the fact sheets relative to integrating mitigation into the comprehensive plan, fact sheet number one and fact sheet number three, the one related to the social and economic benefits and that final one, number five, listed here on the slide in terms of protecting community infrastructure might be of interest to you. But also, again just sharing that there are a variety of resources within this particular document, again talking through planning for resilience and the connections and important of integrating this hazard mitigation into other types of planning.

With that, just in the interest of time, I'll go ahead and move on to this final slide that I mentioned. Just a link for you to two valuable resources. The first one really is a link to our webpage, but

highlighting that FEMA is divided into 10 regions. There are regional mitigation planning leads in each of our regions who are very knowledgeable sources of information. So I've provided just that broad link to our mitigation planning contacts there, but also the link to our mitigation planning website. In addition to the resource I was just talking about, I've listed two other documents that I thought might be of interest, our document on mitigation ideas—and this is broken out by hazards and lists out a range of types of mitigation activities in addition to project types but also activities that can be used to help reduce risk-- and also just a link to our local, mitigation planning handbook because I thought that might also have some valuable resources for you.

With that I'll go ahead and turn it back over to our hosts.

Kevin: Great! Thanks very much. Great presentation, I think, by all presenters. We haven't seen any questions come in, so at this point I'm just going to remind folks that our next webinar is another topical webinar in this series on measuring success in resilience. It will be next Wednesday at 3:00 EST. As a reminder that's a Wednesday, not a Thursday. I do want to thank you all again for joining. Have a great holiday weekend. If you have any questions later on, please feel free to email them to resilientrecovery@HUD.gov . Thanks very much.

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